

AMENDMENTS TO THE CLAIMS

Claims 1-14 (Cancelled)

Claim 15. (Currently Amended)

A communication method, comprising the steps of:

transmitting a plurality of first optical signals along a first optical communication path segment, each of said plurality of first optical signals being at a respective one of a plurality of wavelengths;

extracting one of the wavelengths corresponding to one of said plurality of first optical signals from said first optical communication path segment;

supplying a second optical signal to a second optical communication path segment in response to said one of the wavelengths corresponding to one of said plurality of first optical signals extracted by said extracting step;

successively extracting data constituting [at least a] respective portions ~~portion~~ of information carried by said second optical signal at a plurality of locations provided along said second optical communication path segment.

Claim 16. (Currently Amended)

A method in accordance with claim 15, wherein ~~a wavelength of~~ said one of the wavelengths of said plurality of first optical signals is different than a wavelength of said second optical signal.

Claim 17. (Currently Amended)

A method in accordance with claim 15, wherein [a wavelength of] said one of the wavelengths of said plurality of first optical signals is substantially the same as a wavelength of said second optical signal.

Claim 18. (Currently Amended)

A communication method, comprising the steps of:

successively modulating a first optical ~~signal~~ signals each at one of a plurality of groups of locations along a first optical communication path;

supplying a plurality of second optical ~~signal~~ signals each at a respective one of a plurality of wavelengths to a second optical communication path based on a respective one of said modulated first optical ~~signal~~ signals; and

supplying a plurality of additional optical signals to said second optical communication path,

each of said second optical ~~signal~~ signals and said additional plurality of optical signals being at a respective one of a plurality of wavelengths.

Claim 19. (Original)

A communication method, comprising the steps of:

supplying a plurality of first optical signals to a first optical communication path segment, each of said plurality of first optical signals being at a respective one of a plurality of wavelengths;

successively modulating a second optical signal at a plurality of locations along a second optical communication path segment, said second optical signal being modulated in accordance with first data associated with said plurality of locations;

extracting one of said plurality of first optical signals from said first optical communication path segment, said one of said plurality of first optical signals carrying second data;

passing remaining ones of said plurality of first optical signals from said first optical communication path segment to a third optical communication path segment;

adding a third optical signal to said third optical communication path segment in response to said second optical signal; and

supplying a fourth optical signal to a fourth optical communication path segment in response to said extracted one of said plurality of first optical signals.

Claim 20. (Original)

A method in accordance with claim 19, further comprising the step of sensing portions of data carried by said fourth optical signal at respective locations along said fourth optical communication path.

Claim 21. (Original)

A method in accordance with claim 19, wherein a wavelength of said one of said plurality of first optical signals and a wavelength of said third optical signal are substantially the same.

Claim 22. (Original)

A method in accordance with claim 19, wherein a wavelength of said one of said plurality of first optical signals and a wavelength of said third optical signal are different.

Claim 23. (Original)

A method in accordance with claim 19, wherein said first and third optical communication paths constitute portions of a looped optical communication path.